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United States Department of Agriculture,

OFFICE OF THE SECRETARY—Circular No. 47.

Contribution from the Office of Experiment Stations, A. C. True, Director.

May 3, 1915.

COOPERATIVE AGRICULTURAL-EXTENSION WORK.

INTRODUCTION.

Extension work is that phase of instruction which is carried on among people who are not resident at an educational institution. During the past 10 years the Department of Agriculture and State agricultural colleges have been developing special methods of agricultural extension work to make their knowledge and discoveries available to the farmers. This circular is written to explain briefly the extension work now carried on, and to point out how the farmers and their families may avail themselves of the services of the department and the colleges.

HISTORICAL DEVELOPMENT.

Probably the first organizations to take up educational work among farmers were the early horticultural and agricultural societies. Agricultural fairs, exhibits, and shows were and are often organized by these societies. Some of them had acre crop contests and farm management contests similar to those of to-day. Lectures before these societies were probably forerunners of the present farmers' institute system.

In 1914 farmers' institutes were carried on by State departments of agriculture in 21 States and by colleges of agriculture in 27 States. Over 1,800 persons were employed as institute workers; 2,660,000 persons attended regular sessions of farmers' institutes last year; 112,498 persons attended movable schools of agriculture; and over a million people attended other meetings conducted by institute workers.

Prior to 1901 there were no colleges of agriculture, except the one at Cornell University, reporting a separately organized department for agricultural extension. In 1901 Illinois organized an extension staff, and in 1903 three other States, and in 1906 three additional. By the beginning of 1910 there were 33 colleges that had organized agricultural extension work. At the present time every college has a separate department or division in charge of its extension service.

COOPERATIVE AGRICULTURAL EXTENSION ACT.

A permanent national system of agricultural extension work was provided by Congress through the passage of the cooperative agricultural extension act of May 8, 1914, commonly known as the Smith-Lever Act. Under this act cooperative agricultural extension work is to be carried on by the State agricultural colleges in cooperation with the Department of Agriculture. This extension work includes instruction and practical demonstrations in agriculture and home economics given to persons not attending or resident in colleges in the several communities and the imparting of information through field demonstrations, publications, and otherwise, the work to be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural colleges.

In order to provide a comprehensive basis for the cooperative agricultural extension work in the several States a general memorandum of understanding was entered into between the department and the colleges. The memorandum provides that the college shall organize and maintain a definite and distinct administrative division for the management and conduct of extension work in agriculture and home economics, in charge of a responsible director selected by the college and acceptable to the Department of Agriculture; shall administer through the extension division thus organized any and all funds it has or may hereafter receive for such work from appropriations made by Congress or the State legislature, by allotment from its board of trustees, or from any other source; and cooperate with the United States Department of Agriculture in all extension work in agriculture and home economics which the department is or shall be authorized by Congress to conduct in the States.

ORGANIZATION OF THE EXTENSION WORK IN THE DEPARTMENT OF AGRICULTURE.

The United States Department of Agriculture administers this work through the States relations committee which represents the department in the general supervision of all its cooperative extension work in agriculture and home economics. The States relations committee also has charge of business connected with the administration of funds provided in the States under the cooperative agricultural extension act. Before the State undertakes any work requiring the expenditure of the cooperative agricultural extension funds, the act requires that projects shall be submitted showing the lines of work and shall be approved by the Secretary of Agriculture or his representative. The distribution of the funds among the several types of extension work carried on within the States is mutually agreed upon by the Department of Agriculture and State college of agriculture.

In addition to the cooperative agricultural extension fund, Congress makes certain direct appropriations to the Department of

Agriculture for extension work. The department's most important activities are the farmers' cooperative demonstration work and several lines of extension work of the Bureau of Animal Industry. The farmers' cooperative demonstration work is in two sections, one for the 15 Southern States and the other for the 33 States outside of that area. The Bureau of Animal Industry is conducting extension work in dairying, animal husbandry, hog-cholera prevention, boys' pig clubs, and boys' and girls' poultry clubs.

ORGANIZATION IN THE STATES.

The organization established in most State agricultural colleges consists of a division, at the head of which is a director who is in charge of all cooperative agricultural extension work in his State. Under this director there generally are men in charge of various lines of work. In some States a State leader has charge of county agent work and boys' and girls' club work, the agents in charge of club work being subordinate to him; in other States there is a separate State leader for the club work. The number of officers assisting the director varies with the size of the State and the development of extension activities. In addition to the supervising agents there are generally specialists engaged in conducting movable schools and in other ways cooperating with the county agents in the instruction of farmers and their families.

TYPES OF EXTENSION WORK.

The farm demonstration and advisory work carried on in the Northern and Southern States has so far constituted the principal extension activities of the Department of Agriculture. In 1903-4 Congress made an appropriation to counteract the ravages of the Mexican cotton-boll weevil. A small portion of these funds was devoted to a work conducted by the late Dr. S. A. Knapp to try out his method of teaching by demonstrations. The features of the work consisted of personal visits of the department's representatives to farms where demonstrations were carried on by the farmer under careful instructions and the multiplying of these actual examples of what farmers could do under instruction. At first the work was devoted mainly to improving the cultural methods of raising cotton under boll-weevil conditions. Very soon, however, it was seen that the difficulty could be met only by a general campaign for diversification and better agricultural practices. This was for the purpose of enabling the farmer to meet the exigency by reducing his dependence upon cotton as the sole source of income and maintenance. With this purpose in view demonstrations in corn and many other crops were instituted.

FARM DEMONSTRATIONS.

The farm demonstration, in the early history of such work, usually consisted of from 1 to 10 acres on which the farmer, with his own labor and entirely at his own expense, undertook to grow some particular crop under the agent's careful supervision. The selection of the crop depended entirely upon the needs of the community. A careful account was kept and a report made at the end of the season. The agents were required to arrange for as many demonstrations as they could properly supervise.

THE COUNTY AGENT.

About the year 1906 counties began to contribute toward the salary of the agents of the department and their work became more intensive and the work of each agent was confined to a county. With this limited territory they could arouse the interest of farmers generally by greatly increasing the number of examples or demonstrations of better methods of farming. The character of demonstrations was enlarged to include all of the standard farm crops, gardens, pastures, and in later years the breeding, raising, and feeding of live stock.

Meetings were held at the demonstration plats for the purpose of giving information to a large number of farmers. At these meetings the agent would go over the farm with those assembled, discuss the operations informally, and invite questions. The farmer saw the value of the better methods and gradually applied them to the whole farm. Demonstrations varied in size and character, depending upon the problem to be met. The results of hundreds of these demonstrations in a county gave the farmers confidence in the ability of the agent, and thus grew up a wide field of work on the part of the county agent in giving general instruction and advice to farmers where he was unable to visit their farms regularly.

For the last five or six years county agents have been working with organized bodies of farmers such as farmers' unions, granges, and farmers' clubs. It was noted a number of years ago that where the county agent could secure the cooperation of such an organized body of farmers in the community in conducting demonstrations and giving information his work became more effective. Out of this experience has developed a systematic effort on the part of the county agent to work through organized bodies of farmers and to create organizations in communities where there were none.

Prior to 1912 practically all of the extension work of the department of this character was carried on in the 15 Southern States. In that year \$165,000 was made available to extend the work into the Northern and Western States, and this work was placed under the supervision of the Office of Farm Management. The work in the North has grown rapidly and now has more than double its original

Federal appropriation. Out of the work in the South and the North has grown a large field of activity now generally known as county agent work or demonstration work through county agents.

It is recognized by all engaged in the work that the county agent should be a man of practical experience in farming and of such personality as to enable him to become a leader among the farmers of his county. He must also have such agricultural education and technical training as fit him for this important duty. Other things being equal, preference is given to graduates of agricultural colleges who have the proper personality and practical experience.

It will be seen that one of the duties of the county agent is to bring to the farmers of his county on their own farms the results of scientific investigations in agriculture and the experience of successful farmers, and to influence the farmers to put these into practice through demonstrations. In his organization work, as explained above, he assists in reorganizing and redirecting the agriculture of the community, and assists all economic and social forces working for the improvement of agriculture and country life. He gives instruction not only in those subjects which are generally recognized under the head of improved agricultural practices, but also in farm management, marketing, and purchasing supplies. In all of this work he conducts a large number of demonstrations, gives out much valuable information, and works, as far as possible, through and with such organizations as granges, farmers' unions, alliances, organized farmers' institutes, community clubs, etc. In some of the States organizations called farm bureaus have been developed to cooperate with the county agent in his work. The farm bureau may include in its membership any person who is interested in better farming. Its officers are generally selected annually. It has an executive committee which has the responsibility of arranging for the financing of the county agent's work, and its committees, both central and local, assist the county agent in carrying out the program of work for the county.

January 1, 1915, there were approximately 1,000 county agents employed in demonstration work in the United States, distributed as follows: Alabama, 65; Arizona, 2; Arkansas, 47; California, 9; Colorado, 8; Connecticut, 1; Delaware, 1; Florida, 34; Georgia, 59; Idaho, 3; Illinois, 12; Indiana, 28; Iowa, 9; Kansas, 9; Kentucky, 30; Louisiana, 37; Maryland, 9; Massachusetts, 8; Michigan, 12; Minnesota, 25; Mississippi, 39; Missouri, 12; Montana, 5; Nebraska, 6; New Hampshire, 2; New Jersey, 4; New Mexico, 4; New York, 23; North Carolina, 63; North Dakota, 15; Ohio, 7; Oklahoma, 51; Oregon, 10; Pennsylvania, 14; Rhode Island, 1; South Carolina, 39; South Dakota, 3; Tennessee, 31; Texas, 81; Utah, 7; Vermont, 8; Virginia, 55; Washington, 9; West Virginia, 23; Wisconsin, 9; and Wyoming, 3.

BOYS' AND GIRLS' CLUB WORK.

Boys' and girls' club work furnishes one of the best opportunities for teaching by example. Boys' corn clubs and other agricultural clubs have been in existence for some years. The department in cooperation with various agricultural colleges did a great deal to popularize this demonstration work and make it effective through acre contests in corn growing. Boys and girls between the ages of 10 and 18 are admitted to these clubs, the work being conducted very largely in cooperation with school officials and teachers in the rural communities. These clubs are supervised by State agents or assistants located at the agricultural colleges and represent both the college and the department. They are assisted by county agents who aid in the organization and maintenance of the work and by club specialists from the Offices of Farmers' Cooperative Demonstration Work in the United States Department of Agriculture.

By far the most widespread and numerous organizations of this character are the boys' corn clubs. The members enter into competition in corn growing on an acre of ground, on their fathers' farm as a rule. Prizes are provided and the basis of award is the largest production at the lowest cost, with best exhibit of 10 ears and best essay on their year's work. Definite instructions in preparation of the soil, planting, cultivation, etc., are given to the members. They are taught valuable lessons about the handling of the soil, selection of good seed, improvement of varieties, use of fertilizers, cost accounting, etc.

Clubs have also been organized for contests in the growing of potatoes, cotton, grain, apples, as well as in the raising of pigs and poultry. In most of the States the prizes now offered in all of these clubs have educational value, such as scholarships at the agricultural colleges or at short courses, trips to points of interest, etc.

Boys' pig clubs have been organized to stimulate interest in swine production, and to teach boys profitable methods of feeding, the value of the best breeds, and the home production of meat for the family. This work supplements the boys' corn clubs by showing the boys that it is profitable to sell crops by feeding them to live stock. Members of the clubs are also taught the curing of meats at home, the judging of hogs, and their selection for breeding and marketing purposes. Important consideration is given to management, feeding, sanitation, and to the prevention of diseases of swine, especially hog cholera.

Prizes are awarded on the basis of excellence of hogs fed for purpose intended, gain in weight, cost of production, and best kept record of feeding and care. Prizes are offered for animals raised for breeding purposes and for slaughtering, and for the best brood sow with litter.

The objects of the boys' and girls' poultry clubs are to teach poultry raising, handling, and marketing; the value of uniform prod-

uct of high class for cooperative marketing, better care of poultry and eggs, and the increased revenue derived from better breeding and management. Members of the clubs raise a certain number of fowls, keep accurate account, make exhibits at the fairs, and write a composition on some phase of their work.

GIRLS' DEMONSTRATION WORK.

The objects of the girls' demonstration work are to teach girls gardening and canning of vegetables and fruits for home and market; to teach the family how to utilize the surplus and waste products of the farm and garden; to teach profitable farm poultry raising and stimulate cooperation among members of the family and in the community; to provide a means for girls to earn money at home; to pave the way for practical demonstrations in home economics, and to furnish teachers a plan for correlating home work with school work.

This work was first begun with the canning club. Girls from 10 to 18 years of age are enrolled to plant and cultivate a garden of one-tenth of an acre. The most important part of the training, however, is the canning of products of the garden for home and market. Prizes are awarded on the basis of the quality and quantity of the products of the garden and the variety, quality, and quantity of the canned product, the profit shown by cost accounting, and the written account of how the crop was made. A uniform club label is provided and a standard weight and grade of canned product fixed for marketing purposes. Encouragement is given in cooperative marketing.

HOME ECONOMICS EXTENSION WORK.

All of the extension work described in this circular is conducted in the interest of all the people on the farm. However, it is equally important that there should be special extension work for women and girls on the farm. This special work is now being developed along the same general lines as the extension work in agriculture.

Out of the girls' canning club work has grown the employment of county women agents, or home demonstration agents. When sufficient funds are provided a well-trained woman is employed to give instruction in home economics to farmers' wives and daughters throughout the county. She organizes clubs, not only of girls but of women, gives them instruction, conducts demonstrations, and superintends the putting of the lessons given into practice in the homes.

In home economics as in agriculture there are, in addition to the county agents or leaders, movable schools, general neighborhood meetings, conferences, etc., and specialists to assist the county agents. Among the problems now being taken up are children's welfare, selection, preservation and preparation of food, canning of fruit and vegetables on the farm, the selection and protection of water supply,

sewage disposal, house ventilation, household equipment and management, use of labor-saving devices and machinery, control of insects and other pests, etc.

EXTENSION WORK THROUGH SPECIALISTS.

Both at the college and in the Department of Agriculture are certain specialists who aid county agents in their work, and also give direct instruction to farmers in counties where there are no county agents. In the Department of Agriculture the principal lines of extension work of this character being conducted are in hog-cholera work, pig and poultry clubs, dairying and animal husbandry. All of this work is conducted in cooperation with the agricultural colleges in the several States under a project agreement mutually entered into as a part of the general system of cooperation under the general memorandum of understanding between the Secretary of Agriculture and the colleges of agriculture.

In hog-cholera work veterinary field agents have been appointed to cooperate with county agents and demonstrate to them and to local veterinarians and farmers the prevention of loss from hog cholera and of the spread of the disease from herd to herd by the use of the serum treatment and proper quarantine and sanitation of premises.

In the dairy-extension work specialists are appointed to conduct work in the various States through county agents, and otherwise by organizing cow-testing associations, bull associations, teaching the keeping of herd records, planning the construction of silos, the remodeling of dairy barns, milk houses, and other dairy buildings, establishing feeding demonstrations, management of herds, and other special dairy-farm problems.

MOVABLE SCHOOLS.

Short, practical courses of instruction, accompanied by demonstrations, illustrated lectures, and exhibits, organized and conducted by specialists attached to the agricultural colleges, are given in different localities. The local arrangements for these schools are often made by the county agents. These schools commonly occupy one week, but in some cases a somewhat shorter or longer period.

MONEY AVAILABLE UNDER THE SMITH-LEVER ACT.

Under the provisions of the cooperative agricultural extension act each State is to receive \$10,000 annually for cooperative extension work in agriculture and home economics, making a total of \$480,000 per annum, beginning with the fiscal year 1914-15. For the fiscal year 1915-16 the act provides for \$600,000 additional to be distributed among the several States in the proportion that the rural population of each State bears to the total population of all the States, as determined by the last census. This amount is to be increased by \$500,000 each year until the fiscal year 1922-23. The total amount to be

appropriated that year is \$4,580,000. This additional appropriation does not become available until an equal amount has been appropriated by the legislature of the State or provided by State, county, college, local, or individual contributions from within the State. The aggregate sums to be appropriated by the States to meet the provisions of the act will therefore be \$4,100,000 for the fiscal year 1922-23, and annually thereafter.

The following table indicates the amounts the individual States will receive from the Federal appropriation under the cooperative agricultural extension act, provided these terms are complied with:

Amounts of Federal funds available to the several States under the Smith-Lever Act.

State.	Fiscal year 1914-15.		1915-16	1916-17	1917-18, 1918-19, 1919-20, ¹ 1920-21, 1921-22	1922-23, and there- after.
	Per cent that rural population of State bears to total rural popula- tion. ¹	Amount each State will receive.	Maximum amount each State is entitled to receive.	Maximum amount each State is entitled to receive.	For the above fiscal years, add each year the amount given below to the total for the immedi- ately preced- ing year.	For fiscal year 1922-23 and there- after.
Alabama.....	3.58	\$10,000	\$31,493	\$49,404	\$17,911	\$156,870
Arizona.....	.29	10,000	11,717	13,147	1,431	21,730
Arkansas.....	2.78	10,000	26,680	40,580	13,900	123,980
California.....	1.84	10,000	21,039	30,236	9,198	85,424
Colorado.....	.80	10,000	14,795	18,789	3,995	42,759
Connecticut.....	.232	10,000	11,398	12,563	1,165	19,554
Delaware.....	.213	10,000	11,281	12,347	1,067	18,749
Florida.....	1.08	10,000	16,491	21,898	5,408	54,345
Georgia.....	4.19	10,000	35,174	56,151	20,978	182,020
Idaho.....	.52	10,000	13,110	15,702	2,592	31,254
Illinois.....	4.38	10,000	36,282	58,184	21,902	189,596
Indiana.....	3.16	10,000	28,943	44,729	15,786	139,442
Iowa.....	3.13	10,000	28,794	44,456	15,662	138,428
Kansas.....	2.43	10,000	24,556	36,686	12,130	109,466
Kentucky.....	3.51	10,000	31,088	48,660	17,573	154,103
Louisiana.....	2.35	10,000	24,094	35,839	11,745	106,309
Maine.....	.731	10,000	14,389	18,047	3,657	39,991
Maryland.....	1.29	10,000	17,748	24,203	6,456	62,936
Massachusetts.....	.49	10,000	12,922	15,374	2,443	30,029
Michigan.....	3.00	10,000	28,002	43,005	15,002	133,016
Minnesota.....	2.48	10,000	24,899	37,315	12,416	111,811
Mississippi.....	3.22	10,000	29,330	45,438	16,108	142,086
Missouri.....	3.84	10,000	33,036	52,232	19,196	167,411
Montana.....	.491	10,000	12,952	15,412	2,460	30,172
Nebraska.....	1.79	10,000	20,728	29,668	8,940	83,308
Nevada.....	.14	10,000	10,834	11,529	695	15,699
New Hampshire.....	.36	10,000	12,133	13,909	1,777	24,572
New Jersey.....	1.28	10,000	17,660	24,043	6,383	62,341
New Mexico.....	.57	10,000	13,414	16,259	2,845	33,329
New York.....	3.90	10,000	33,443	52,979	19,536	170,195
North Carolina.....	3.82	10,000	32,953	52,081	19,127	166,846
North Dakota.....	1.04	10,000	16,236	21,431	5,196	52,607
Ohio.....	4.26	10,000	35,557	56,855	21,297	184,640
Oklahoma.....	2.71	10,000	26,256	39,802	13,547	121,081
Oregon.....	.741	10,000	14,442	18,144	3,701	40,352
Pennsylvania.....	6.15	10,000	46,893	77,637	30,744	262,101
Rhode Island.....	.04	10,000	10,220	10,402	183	11,497
South Carolina.....	2.61	10,000	25,691	38,768	13,076	117,223
South Dakota.....	1.03	10,000	16,167	21,308	5,140	52,148
Tennessee.....	3.53	10,000	31,202	48,870	17,668	154,878
Texas.....	5.99	10,000	45,970	75,945	29,975	255,795
Utah.....	.41	10,000	12,438	14,468	2,031	26,655
Vermont.....	.38	10,000	12,275	14,170	1,896	25,543
Virginia.....	3.21	10,000	29,267	45,323	16,056	141,650
Washington.....	1.09	10,000	16,523	21,958	5,436	54,571
West Virginia.....	2.01	10,000	22,071	32,130	10,059	92,484
Wisconsin.....	2.69	10,000	26,164	39,634	13,470	120,454
Wyoming.....	.21	10,000	11,250	12,290	1,041	18,541
	99.988	480,000	1,080,000	1,580,000	500,000	4,580,000

¹ Figures after 1920 subject to returns of Fourteenth Census on rural population.

The totals for each State contain the basic \$10,000 granted each year. To obtain the amount that the State would have to duplicate in any year to receive its entire Federal quota, subtract \$10,000 from the total. Example: The amount Alabama would have to duplicate in 1915-16 is \$31,493 minus \$10,000 or \$21,493.,

For the fiscal year ending June 30, 1915, the United States Department of Agriculture is expending from direct appropriations made to it by Congress the sum of \$1,329,740 in the various lines of extension work enumerated in this circular, almost all of which is being expended under the general memorandum of understanding with the several States. This sum is being met at the present time by contributions from the States more than equal to that amount.

To secure the services of an extension agent any farmer or member of his family should make application to the director of extension work by addressing the agricultural college of the State to ascertain whether or not there is a county agent for his county. If there is one, the name and address will be sent him. If there is no agent, he will be given directions as to the necessary steps to secure a county agent, and in the meantime will be given such information and general service as the extension forces in the State can furnish. Community organizations among farmers will be found helpful in securing this service.

DEPARTMENT AND STATE OFFICERS IN CHARGE OF EXTENSION WORK.

Since June 15, 1914, the general administration of agricultural extension work in the United States Department of Agriculture has been in charge of the States relations committee, consisting of:

- A. C. True.....Director of Office of Experiment Stations.
- E. W. Allen.....Assistant Director of Office of Experiment Stations.
- Bradford Knapp....Special agent in charge of farmers' cooperative demonstration work in the Southern States.
- C. B. Smith.....Agriculturist in charge of farmers' cooperative demonstration work in the Northern and Western States.

The appropriation act of the Department of Agriculture approved March 4, 1915, provides for the establishment of a States Relations Service which will represent the Secretary of Agriculture in his relations with the State agricultural colleges and experiment stations. This service will include the present Office of Experiment Stations (exclusive of the irrigation and drainage investigations) and the two offices of farmers' cooperative demonstration work transferred from the Bureau of Plant Industry. Beginning July 1, 1915, the department's administration of cooperative agricultural extension work will be under the States Relations Service. The State institutions and officers in charge of agricultural extension work are as follows:

STATE INSTITUTIONS AND OFFICERS IN CHARGE OF AGRICULTURAL EXTENSION WORK.

Institution.	Officer.
Alabama Polytechnic Inst., Auburn, Ala..	J. F. Duggar, Dir. of Ext. Work.
Col. of Agr., Univ. of Ariz., Tucson, Ariz..	S. F. Morse, Supt. of Ext.
Col. of Agr., Univ. of Ark., Fayetteville, Ark.	W. C. Lassetter, Dir. Ext. Work.
Col. of Agr., Univ. of Cal., Berkeley, Cal..	Warren T. Clarke, Prof. Agr. Ext.
State Agr. College of Colo., Fort Collins, Colo.	C. A. Lory, Act. Dir. Ext. Service.
Connecticut Agr. College, Storrs, Conn....	H. J. Baker, Dir. Ext. Service.
Delaware College, Newark, Del.....	H. Hayward, Dir. Ext. Service.
Col. of Agr., Univ. of Fla., Gainesville, Fla..	P. H. Rolfs, Dir. Ext. Div.
Georgia State Col. of Agr., Athens, Ga....	A. M. Soule, Dir. Ext. Dept.
Col. of Agr., Univ. of Idaho, Boise, Idaho..	O. D. Center, Dir. Ext. Work.
Col. of Agr., Univ. of Ill., Urbana, Ill....	W. F. Handschin, V. Dir. Agr. Ext. Service.
Purdue University, LaFayette, Ind.....	G. I. Christie, Supt. Agr. Ext.
Iowa State College, Ames, Iowa.....	R. K. Bliss, Dir. Ext.
Kansas State Agr. College, Manhattan, Kans.	J. H. Miller, Dean Div. Col. Ext.
Col. of Agr., State Univ., Lexington, Ky..	Fred Mutchler, Supt. Agr. Ext.
La. State Univ. and A. and M. Col., Baton Rouge, La.	W. R. Dodson, Dir. Agr. Ext.
Col. of Agr., Univ. of Maine, Orono, Me...	L. S. Merrill, Dir. Agr. Ext.
Maryland Agr. College, College Park, Md..	Thos. B. Symons, Dir. of Ext.
Massachusetts Agr. College, Amherst, Mass.	W. D. Hurd, Dir. of Ext. Service.
Michigan Agr. College, East Lansing, Mich.	R. J. Baldwin, Supt. of Ext.
Col. of Agr., Univ. of Minn., Univ. Farm, St. Paul, Minn.	A. D. Wilson, Dir. Ext. and F. I.
Miss. Agr. and Mech. Col., Agr. College, Miss.	E. R. Lloyd, Dir. Ext. Work.
Col. of Agr., Univ. of Missouri, Columbia, Mo.	A. J. Meyer, Sec'y of Agr. Ext.
Montana State College, Bozeman, Mont...	F. S. Cooley, Dir. Ext. Service.
Col. of Agr., Univ. of Nebr., Lincoln, Nebr.	C. W. Pugsley, Dir. Agr. Ext. Service.
Col. of Agr., Univ. of Nev., Reno, Nev....	C. S. Knight, Dir. Agr. Ext.
N. H. Col. of A. and M. Arts, Durham, N. H.	J. C. Kendall, Dir. Ext. Work.
Rutgers Scientific School, New Brunswick, N. J.	Alva Agee, Dir. Div. of Ext.
N. Mex. Col. of A. and M. Arts, State College, N. Mex.	A. C. Cooley, Dir. Ext. Work.
N. Y. State College of Agr., Ithaca, N. Y..	B. T. Galloway, Dir. Div. of Ext.
N. C. Col. of A. and M. Arts, West Raleigh, N. C.	B. W. Kilgore, Dir. Ext. Service.
N. Dak. Agr. College, Agricultural College, N. Dak.	T. P. Cooper, Dir. Ext. Work.
Col. of Agr., Ohio State Univ., Columbus, Ohio.	H. C. Price, Dir. Agr. Ext. Work.
Okla. Agr. and Mech. College, Stillwater, Okla.	W. D. Bentley, Dir. of Ext.
Oregon State Agr. College, Corvallis, Oreg..	R. D. Hetzel, Dir. Ext. Work.
Pennsylvania State College, State College, Pa.	M. S. McDowell, Dir. Agr. Ext. Work.
Rhode Island State College, Kingston, R. I.	A. E. Stene, Dir. Ext. Service.
Clemson Agr. College of S. C., Clemson College, S. C.	W. W. Long, Dir. of Ext.
S. Dak. State College, Brookings, S. Dak..	E. C. Perisho, Act. Dir. Agr. Ext.

State institutions and officers in charge of agricultural extension work—Continued.

Institution.	Officer.
Col. of Agr., Univ. of Tenn., Knoxville, Tenn.	C. A. Keffer, Dir. Ext. Div.
A. and M. Col. of Texas, College Station, Tex.	Clarence Ousley, Dir. Ext. Service.
Agr. College of Utah, Logan, Utah.....	E. G. Peterson, Dir. Agr. Ext. Div.
Col. of Agr., Univ. of Vermont, Burlington, Vt.	Thos. Bradlee, Dir. Ext. Service.
Virginia Polytechnic Inst., Blacksburg, Va.	J. D. Eggleston, Act. Dir. Ext. Work.
State College of Washington, Pullman, Wash.	J. A. Tormey, Dir. Ext. Div.
Col. of Agr., W. Va. Univ., Morgantown, W. Va.	C. R. Titlow, Dir. Agr. Ext.
Col. of Agr., Univ. of Wis., Madison, Wis..	K. L. Hatch, Asst. Dir. Agr. Ext. Service.
Col. of Agr., Univ. of Wyo., Laramie, Wyo.	A. E. Bowman, Dir. Ext. Work.

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